

4.4 Scatter Plots and Lines of Fit

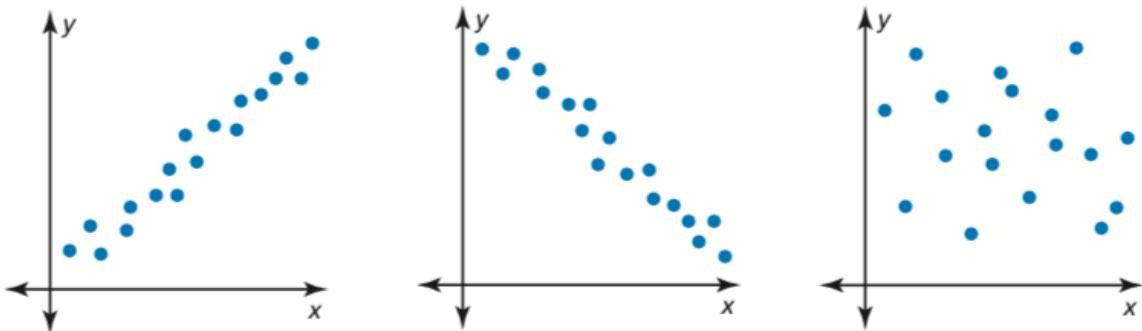
What is a scatter plot?

A **scatter plot** is a graph that shows the relationship between two data sets.

- The two data sets are graphed as ordered pairs.
- Scatter plots can show trend in the data.

Example 1: Identifying correlations between Data Sets

A Correlation is a relationship between data sets.

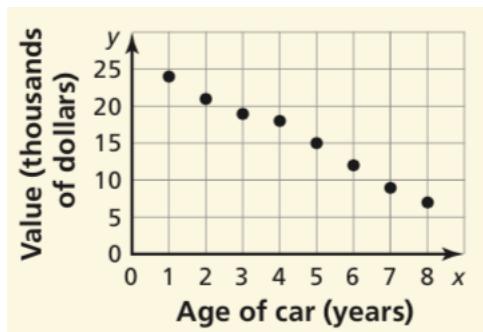


Example 2:

Make a scatter plot of the data. Tell whether the data show a positive, negative, or no correlation.

Temperature (°F), x	82	78	68	87	75	71	92	84
Attendees (thousands), y	4.5	4.0	1.7	5.5	3.8	2.9	4.7	5.3

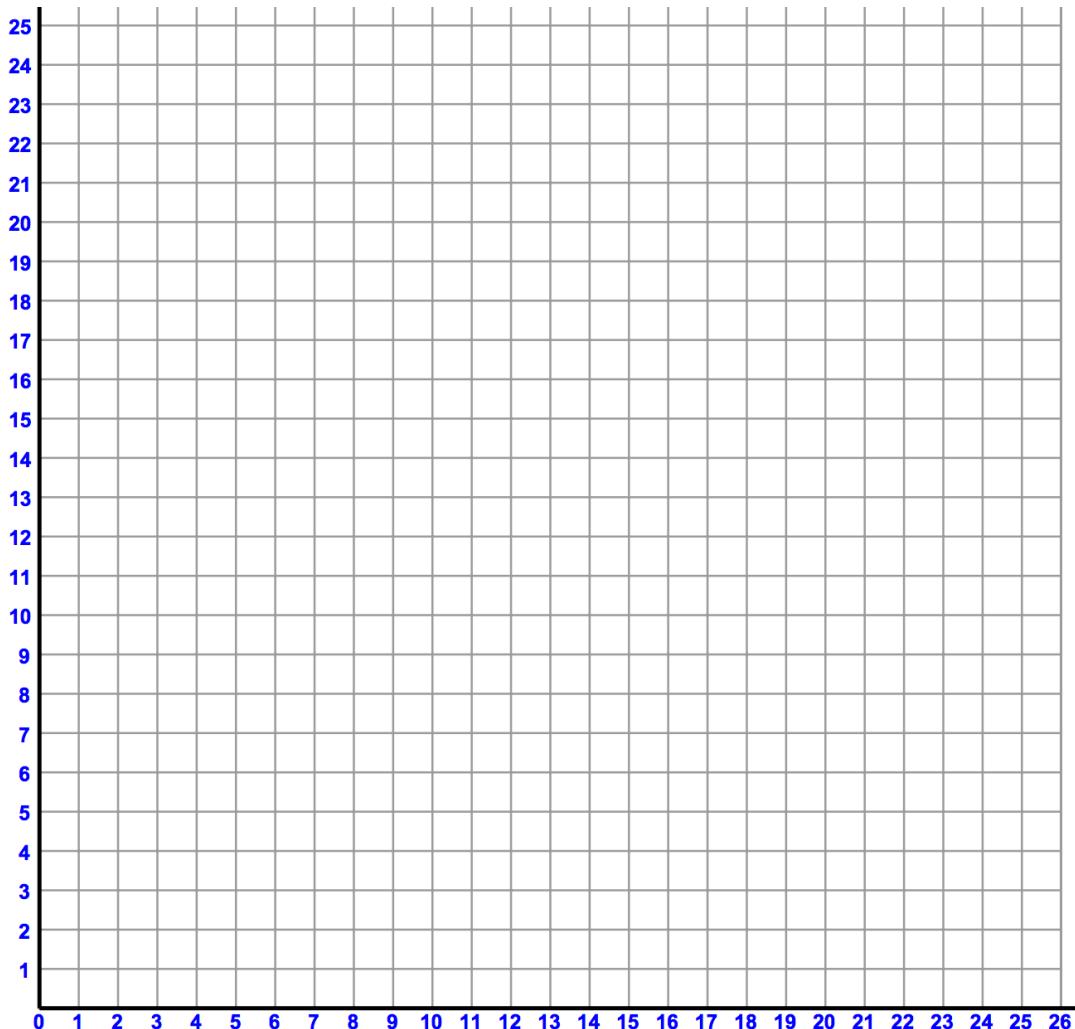
Solution



Example 3: Finding a line of fit

Graph your data on a scatter plot. Analyze the correlation. Interpret the slope and y-intercept of the line of fit.

Week, x	1	2	3	4	5	6	7	8
Sales (millions), y	\$19	\$15	\$13	\$11	\$10	\$8	\$7	\$5

**Classwork / Homework**

3-6, 8, 9-10, 14, 17, 22